Detectors Ensure Function, Safety of Aircraft Wiring



Kennedy Space Center

Eclypse International Corp. Corona, CA

NASA Technology

- Finding the source of a short or open circuit onboard a space shuttle is difficult because cables are ubiquitous, and traditional multimeter devices cannot pinpoint the source of the fray.
- A NASA scientist developed the Standing Wave Reflectometer (SWR) to locate short or open circuits.

Technology Transfer

- Eclypse received an exclusive license for the SWR, then tweaked the interface for easier handling and made the casing more durable.
- Called ESP+, the device can detect a fault in less than 5 seconds; electrical checks that used to take two people 8 hours now takes one person 45 minutes.



Benefits

- The company started with 6 employees and now has 30 people onboard.
- The US Army has purchased 300 ESP+ devices for use in their helicopter damage repair kits and, consequently, has saved \$2.19 million.
- The device enjoys wide usage on airplanes, sea vessels, and even Marine One.

Spinoff 2012 Public Safety